Upper Saddle Creek Restoration Project

A Collaborative Effort Among Multiple Stakeholders

Georgia Partnering Conference
South Atlantic Division
March 10, 2009

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Partnerships

A relationship involving close cooperation between parties having “specific” responsibilities.

Strength lies in differences, not in similarities.

Stephen Covey

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This Project is a Partnership on Multiple Fronts

- Multi-Agency Coordination
- Multi-Stakeholder Interfa
- Multi-Objectives
- Multi-Geographic Parcels
- Multi-Permits
- Multi-Disciplinary Solutions

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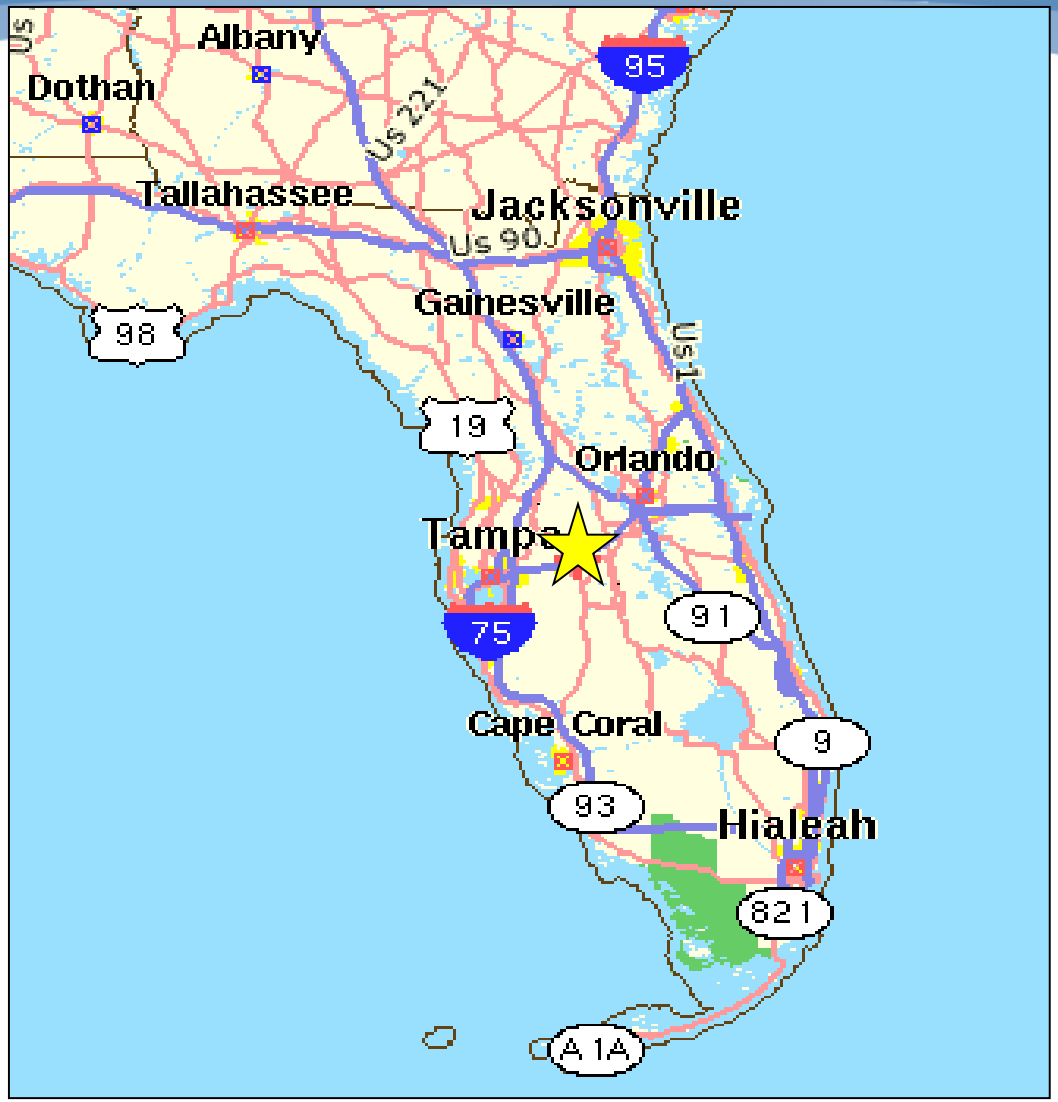
Project Location



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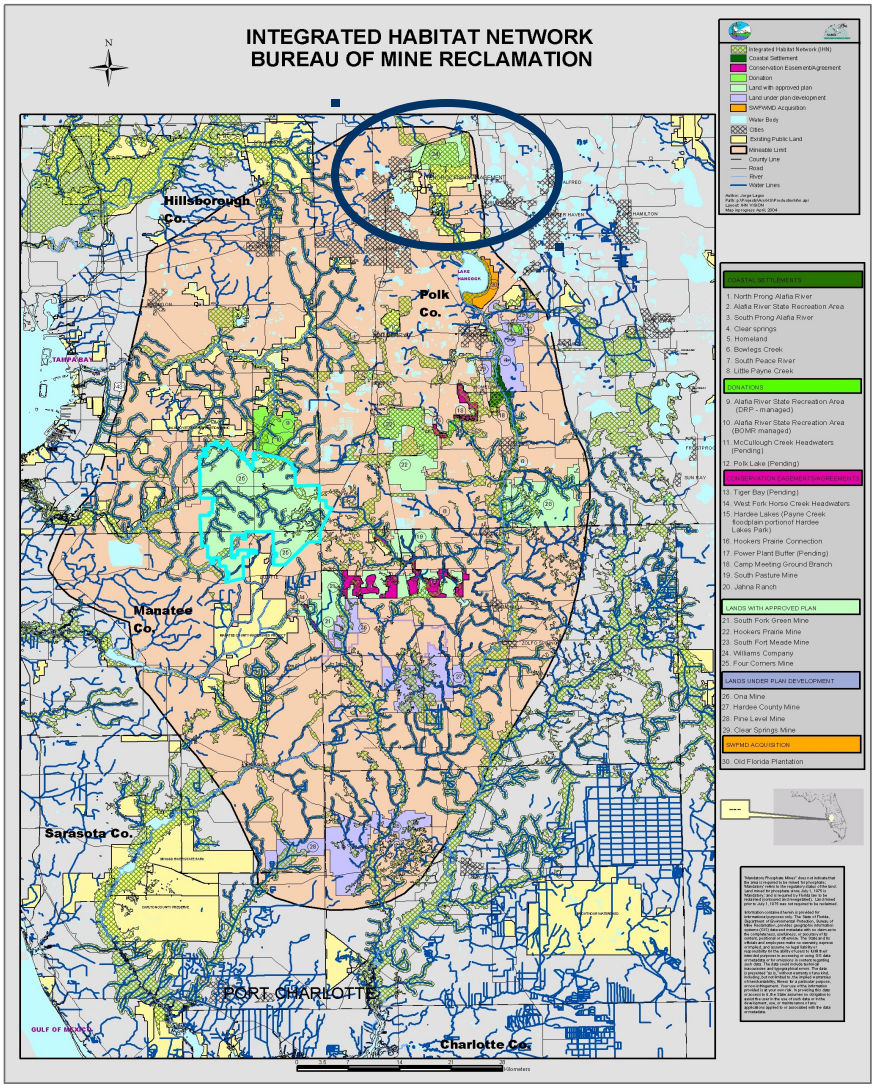
Significance of Planning Area



- Northern-most reach of the Integrated Habitat Network (IHN)
- Upper-most reach of the Peace River system
- Contributes to Lake Hancock – a high priority impaired water body

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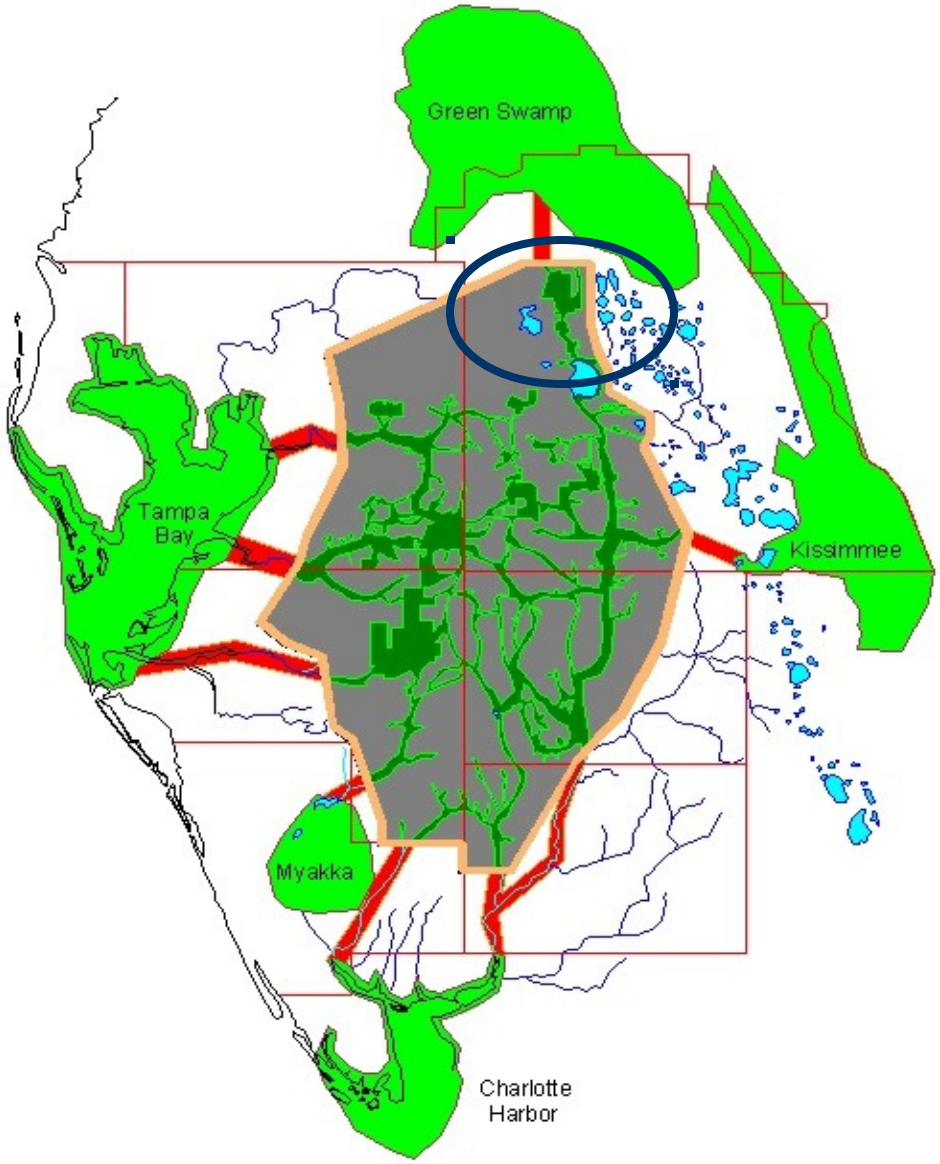
Integrated Habitat Network Features



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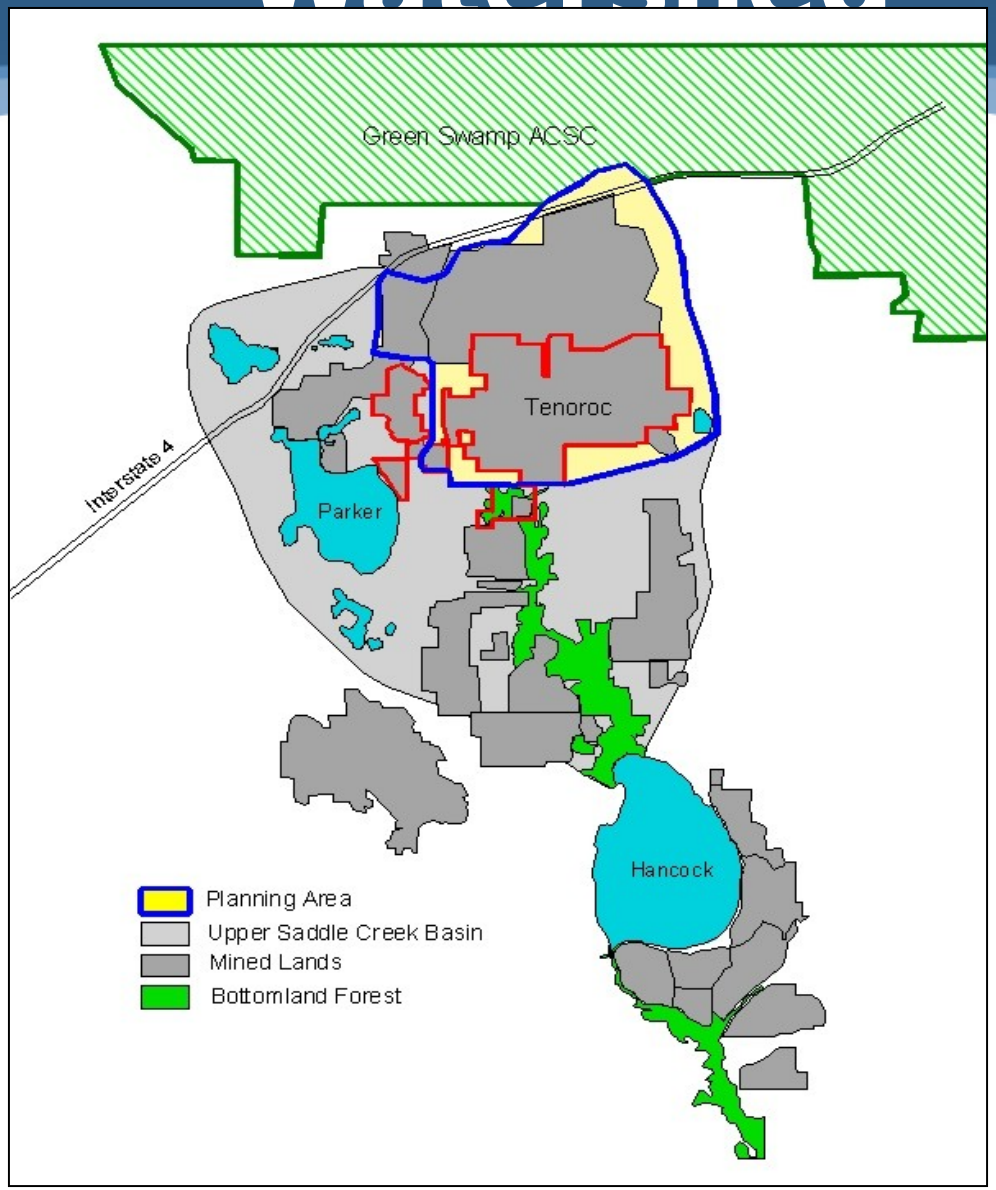
Upper Saddle Creek Watershed



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Project Overview

TENOROC FISH MANAGEMENT AREA
A COOPERATIVE PROGRAM
FLORIDA GAME & FRESH WATER FISH COMMISSION
FLORIDA DEPARTMENT OF AGRICULTURE
POLK COUNTY BOARD OF COUNTY COMMISSIONERS
ESTABLISHED TO MAINTAIN QUALITY
FISHING THROUGH BIOLOGICAL RESEARCH &
MANAGEMENT WITH COOPERATION FROM
SPORTSMEN
FISHING LICENSE REQUIRED

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Aerial View of a Reclaimed Lake

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Aerial View of an Unreclaimed Lake

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Background

- Tenoroc Mine opened by Coronet Phosphate, Inc. in early 50’s – mining operations were discontinued in mid 70’s
- Saddle Creek watershed was recommended for restoration in the 1980 ZW report
- Several Old Lands Program areas were reclaimed during the 80’s to minimum standards
- In 1994, the FDEP, FDOT, and the FWC recognized the need for restoration and set out to establish a plan of attack
- Mitigation requirements for the Polk Parkway was the turning point in the restoration initiative resulting in the 1995 Memorandum of Understanding (MOU)

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The MOU

- Signatories included the USACE, FWC, FDOT, FDEP and SWFWMD
- Outlined agency responsibilities regarding alternative mitigation for Polk Parkway impacts and restoration of the Upper Saddle Creek watershed
- Created a core review committee consisting of representatives from the USACE, SWFWMD and FDEP
- Created an Advisory Committee – the Upper Peace River Ecosystem Planning Committee (UPREPC)

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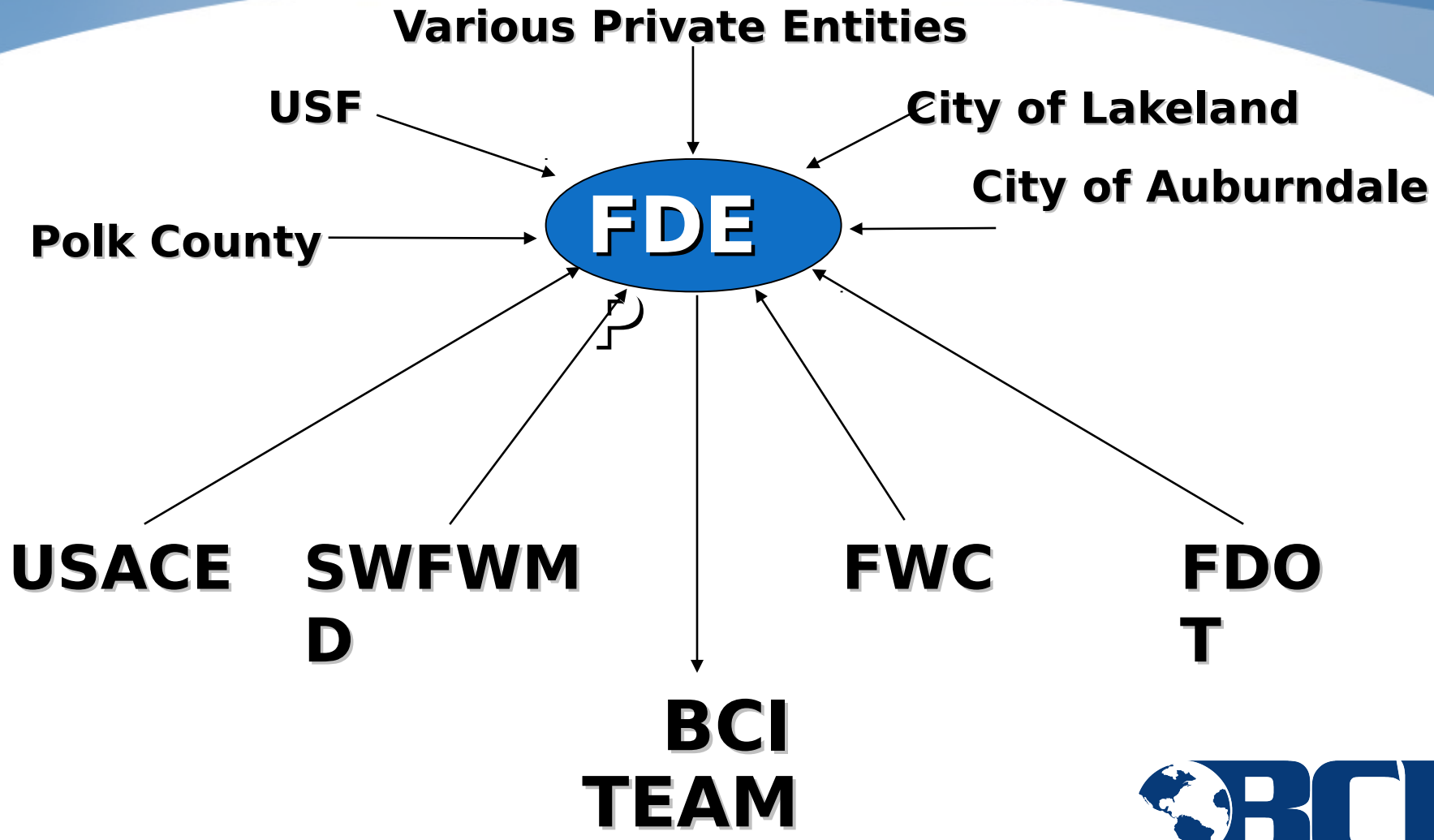
Stakeholders



Major Funding Cooperators

- NLR Trust Fund $ 4,593,896
- FDOT $ 5,405,420
- FWC $ 1,500,000
- State of Florida $ 1,000,000

- Total $12,549,316

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Site Characterization

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Land Form Characteristics

- Approximately 15,000 acres in the core work area
- Numerous waste clay settling areas (CSAs) were constructed during mining operations
- 2000 acres of open water pit
- 6000 acres of mined and un-reclaimed land
- 95 bird species observed during Audubon bird count
- 18 different landform types
- 7 predominant soil classifications
- 16 exotic species observed

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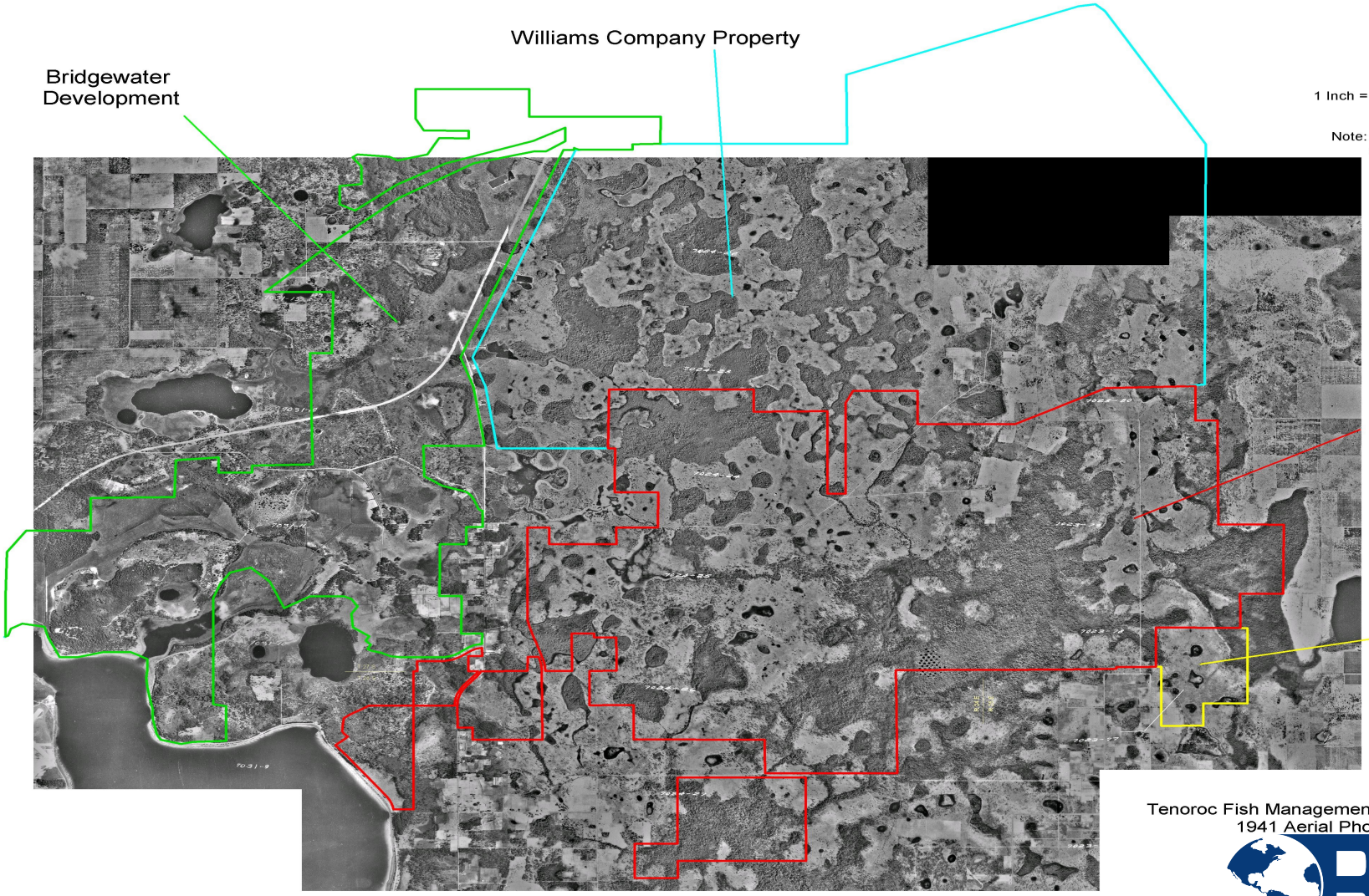
1941 Aerial Photograph



Tenoroc Fish Management Area and Vicinity
1941 Aerial Photograph

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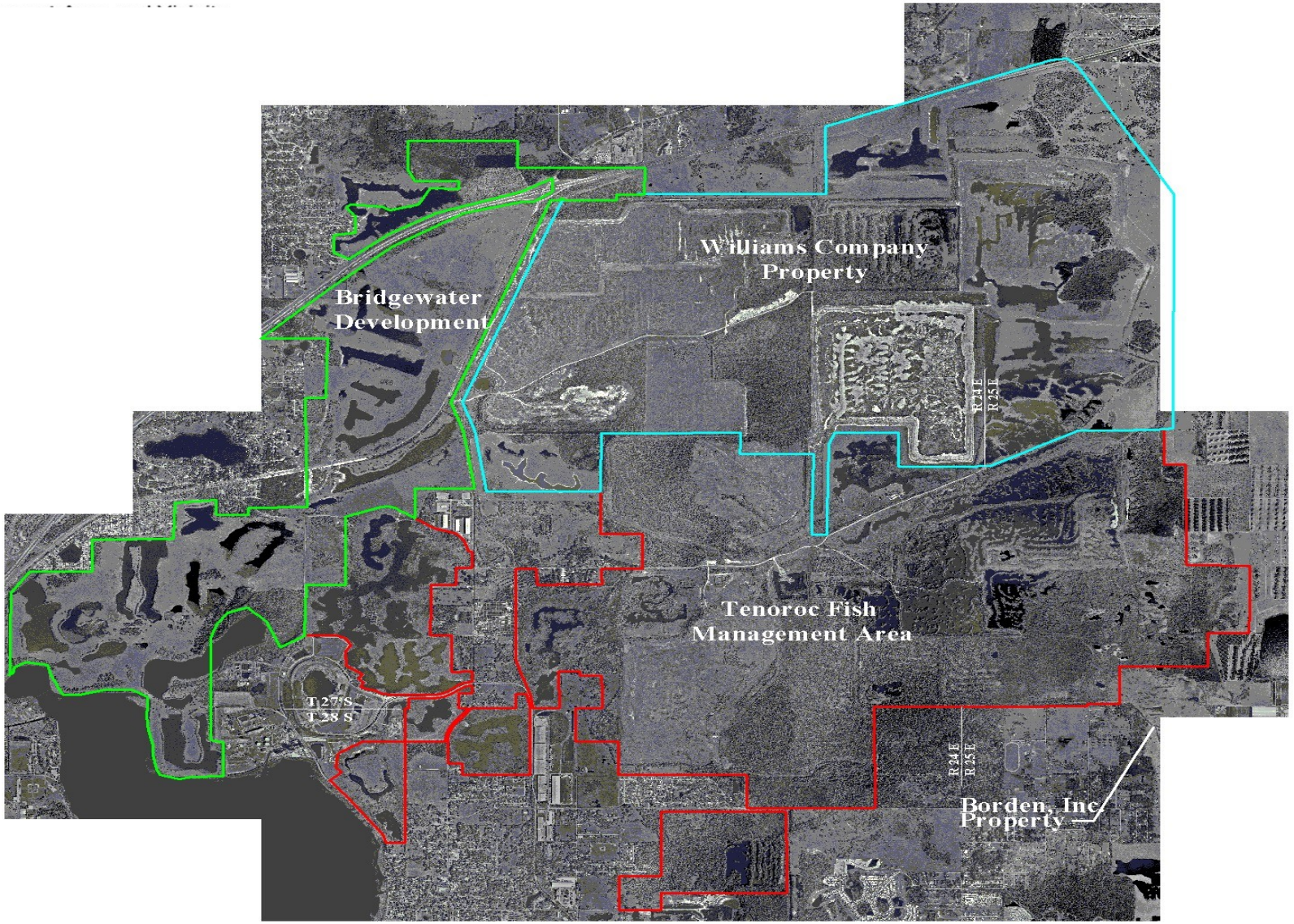
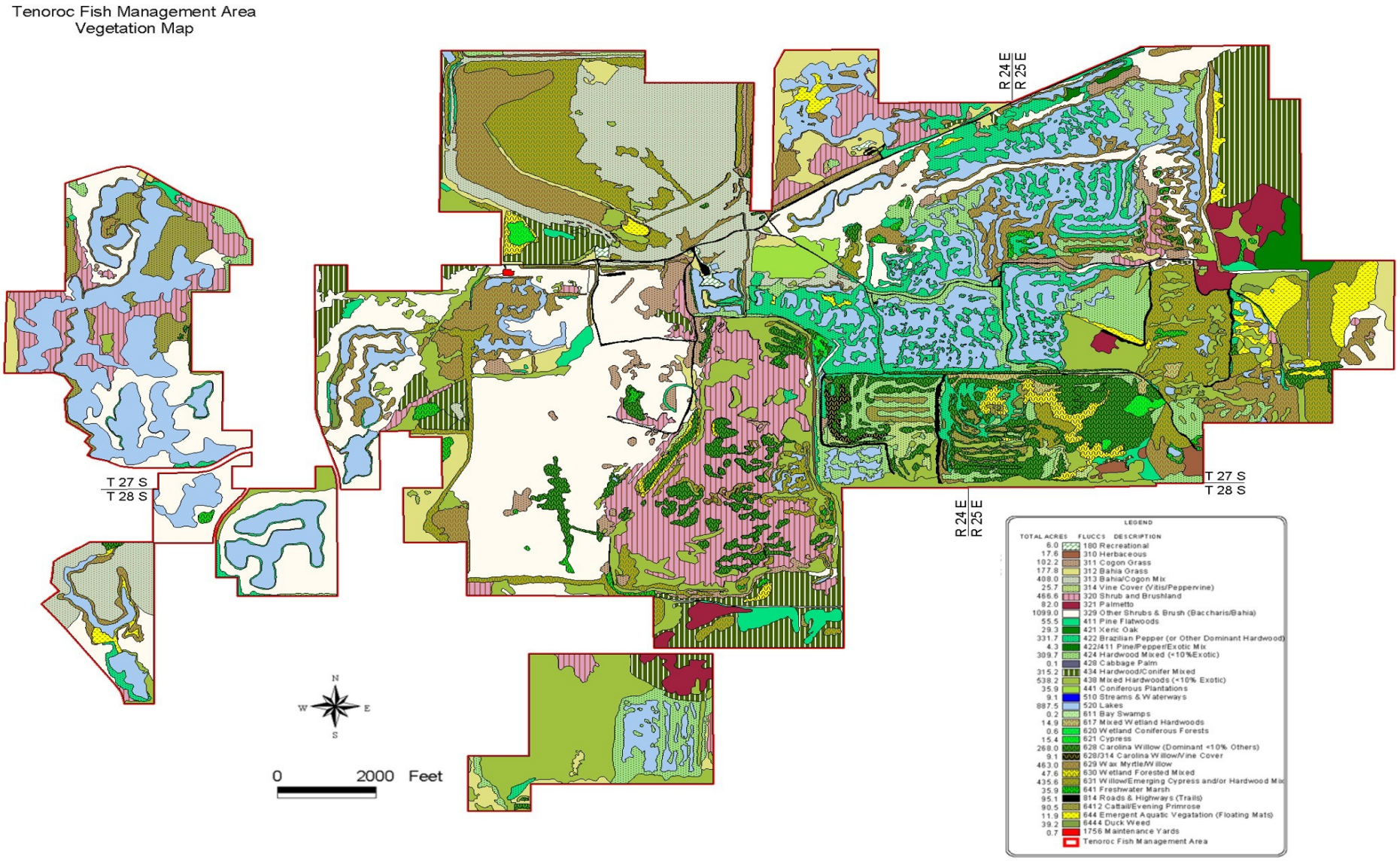
1996 Aerial Photograph



Map of Vegetation Types



Hydrologic Overview

- Impacts that have altered the hydrologic characteristics of the area include:
  - Mining has severely altered flow patterns, reduced surface water outflows, and disrupted ground water recharge
  - Construction of Interstate 4 bisected the northern portion of the watershed
  - Ongoing and impending development activities is resulting in the degradation of surface water quality
  - Flooding has been a recurring problem in the Saddle Creek system for nearly 30 years

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Core Project Goals

1. Hydrologic restoration must increase low flows in the Peace River and prevent increases in downstream flooding
2. Design elements will be planned to restore the ecological connection between the Peace River and the Green Swamp
3. Wetland mitigation will be incorporated into a landscape that includes and compliments adjacent habitats
4. The project area will be managed for long-term ecological viability and environmental protection

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Core Project Goals

5. Mitigation activities will successfully demonstrate restoration of wetlands on reclaimed clay settling areas
6. Showcase a new paradigm of multi-agency cooperation in the use of public funds for regional watershed restoration
7. Restoration and mitigation activities will include an educational component

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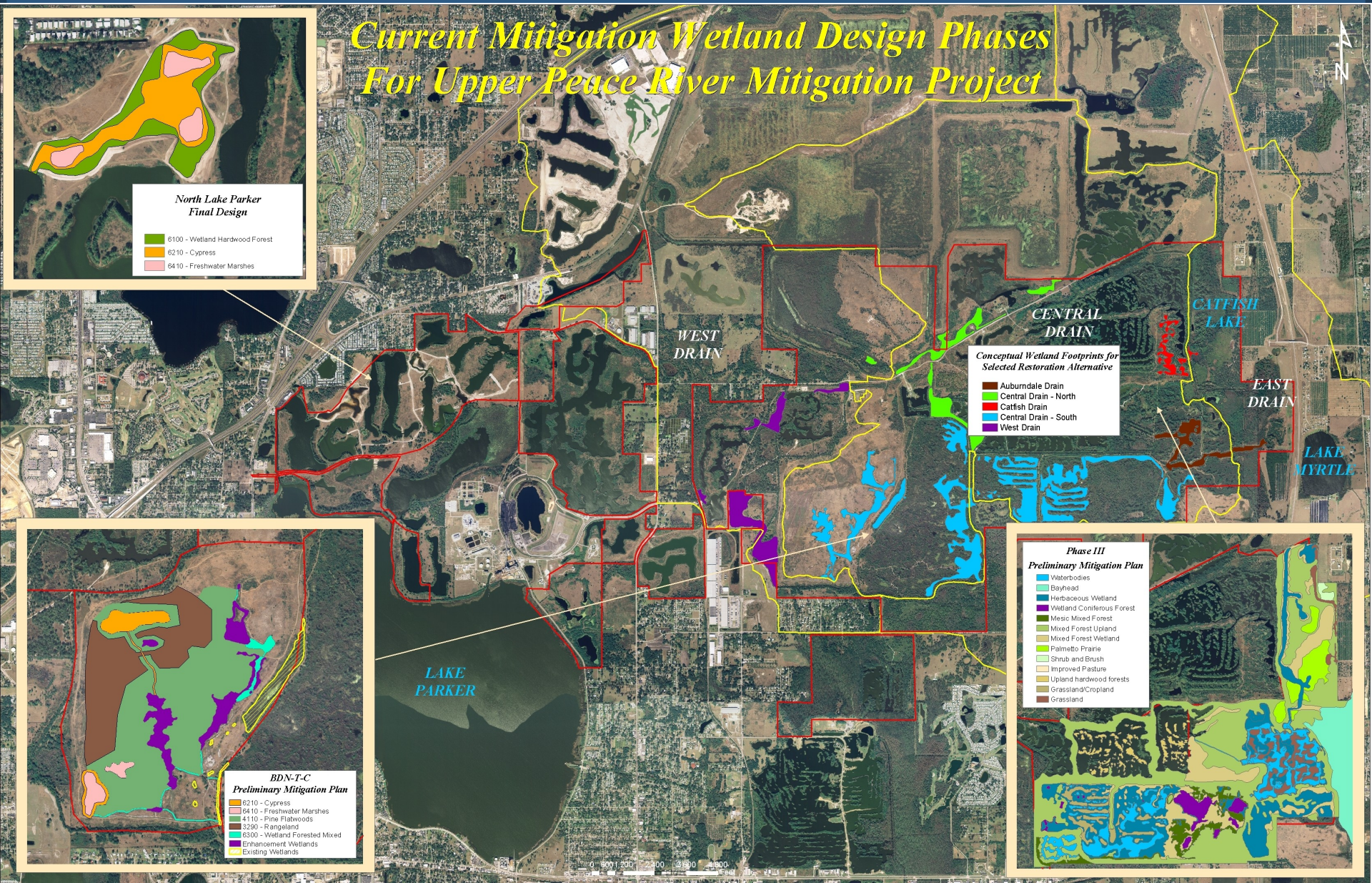
The Base Plan



Planning the Work

- Understand the core objectives
- Define unique tasks
- Link the tasks and set durations and milestones
- Create a master schedule

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Working the Plan… an Adaptive Process

- Identifying obstacles and working through solutions
- Taking advantage of synergistic situations – turning obstacles into benefits
- Remaining flexible but avoiding “pig trails”
- Tracking progress

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Partnership Spin-off Projects

- Borden, Inc. Landfill
  - Eliminated a perimeter/transecting ditch system
- Bridgewater Development
  - Land was purchased by the State of Florida for inclusion in the TFMA
- City of Auburndale
  - Treated wastewater effluent disposal system (spray field) was accommodated – provides base flow to created wetland system
- City of Lakeland
  - Land swap allowed ownership continuity
  - Provide treatment for a large lake outfall system
- Noah's Arc
  - Provided fill to accommodate a new special needs center

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Partnership Spin-off Projects

- Polk County
  - Eliminated a flooding problem in an adjacent development
  - Provided clean fill material for us in the construction of a new landfill
- FDEP
  - Tapped by FDEP to evaluate low order stream restoration opportunities in the Peace River watershed – one will occur in this project
- The Williams Company
  - Provided stormwater attenuation capacity for a major development initiative
- University of South Florida
  - Supported wetland mitigation needs of the new USF Polytechnic Center
- Saddle Creek Corporation
  - Land swap facilitated wetland mitigation needs of an expanding

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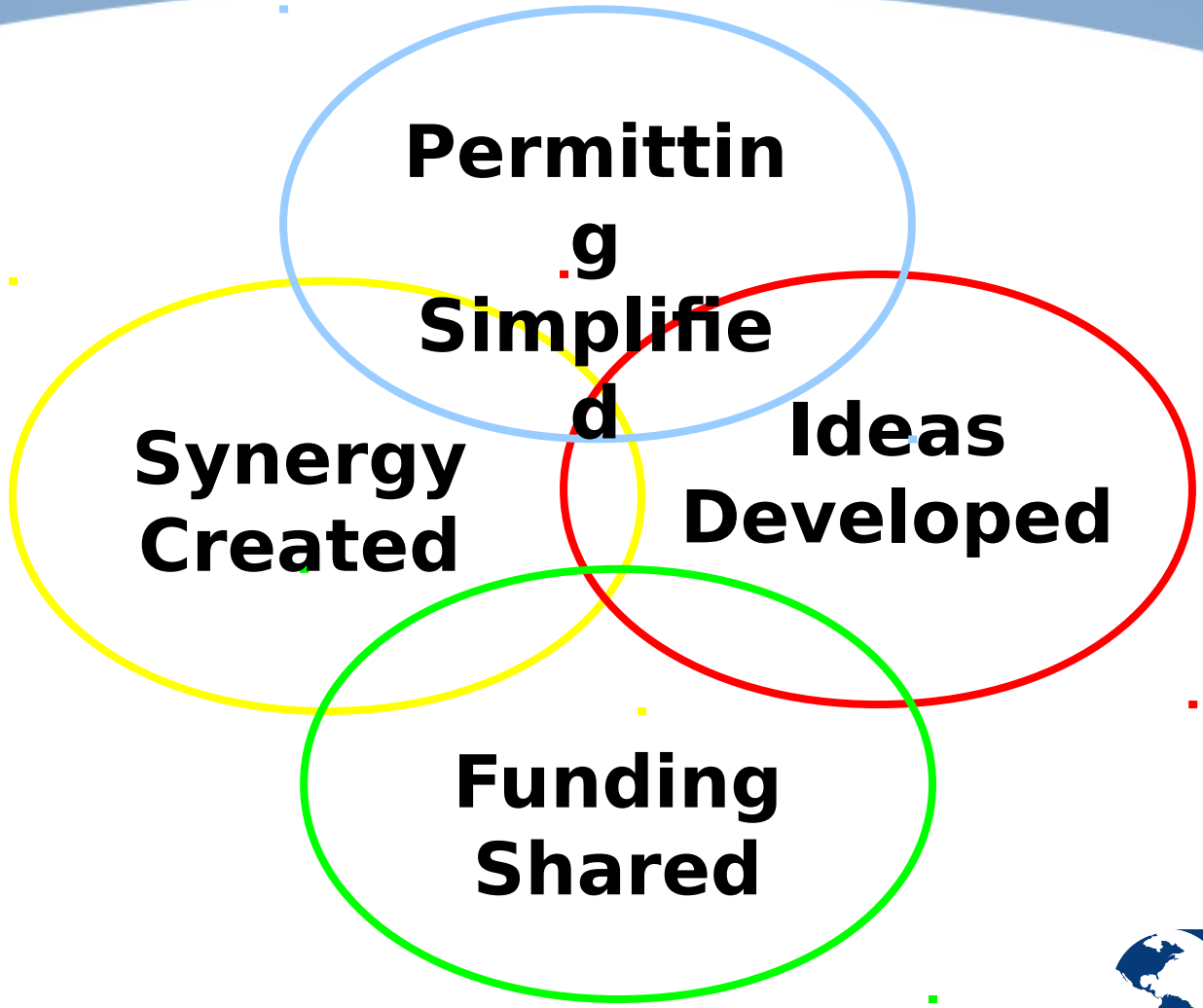
Pros of Multi-Stakeholder Participation



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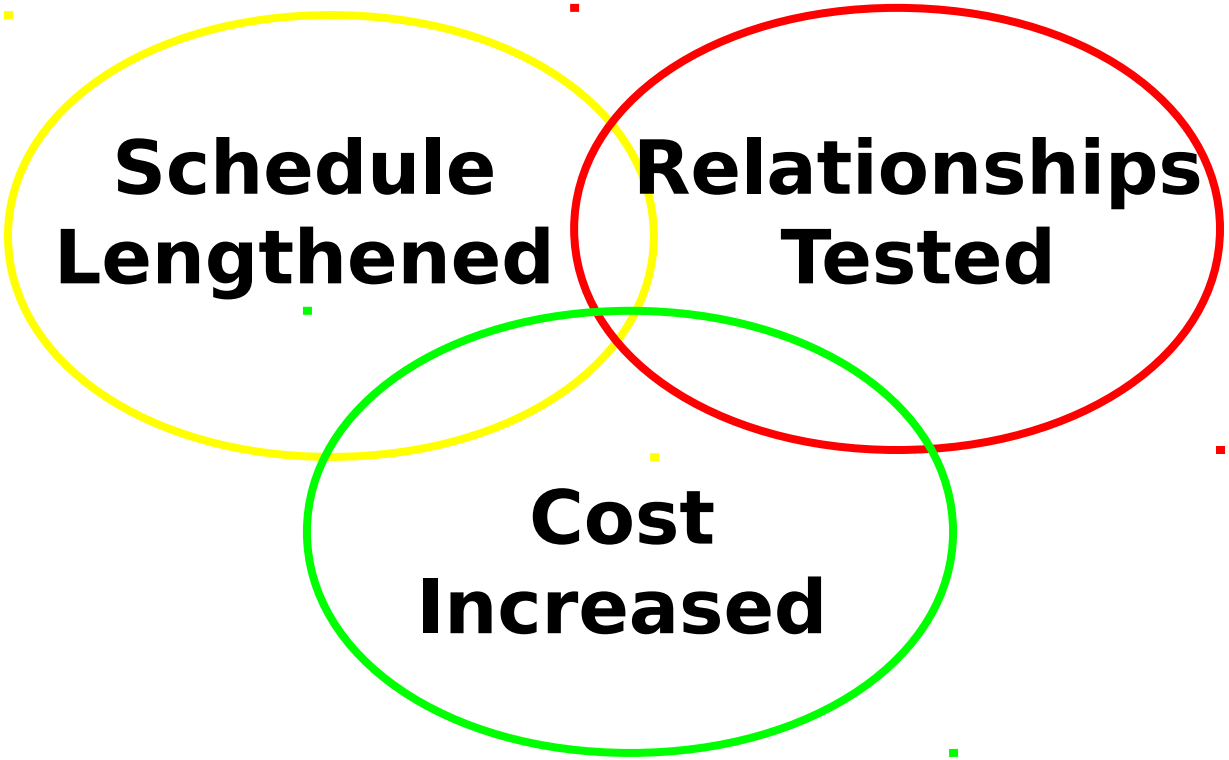
Cons of Multi-Stakeholder Participation



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Necessities of Partnerships

- Strong manager
  - Identifies roles and responsibilities
  - Ensures clear and open communications
  - Distinguishes style from substance
  - Knows when to move forward
- Flexible team
- Regular meetings
- Disciplinary breadth
- Thorough documentation

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Conclusion

Partnering = Success

“No problem can stand the assault of sustained thinkin

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Questions?

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